



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,530	03/08/2002	Claude Dubief	5725.0301-01	9725

22852 7590 03/12/2003

FINNEGAN, HENDERSON, FARABOW, GARRETT &  
DUNNER LLP  
1300 I STREET, NW  
WASHINGTON, DC 20006

EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
----------	--------------

1615

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/092,530

Applicant(s)

DUBIEF ET AL.

Examiner

Lakshmi S Channavajjala

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 30-39 and 42-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-39 and 42-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

Receipt of request for extension of time and amendment C, both dated 11-4-02 is acknowledged.

#### *Status of claims*

Claims 40 and 41 have been canceled. Claims 30 and 65 have been amended.

In response to applicants' amendment, the following rejections (of paper #5) have been withdrawn:

1. Rejection of claim 30 under 35 USC 112, 2<sup>nd</sup> paragraph.
2. Rejection of claims 30-32 and 44-67 under obviousness-type double patenting rejection.
3. Rejection of claims 30-32, 44-50, 52-62 and 64-66 as being anticipated by WO 94/21224.

The following rejection has been maintained:

- 1. Claims 30-39 and 42-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 93/23009 to Kumar et al (hereafter WO '009) in view of US 5,417,965 to Janchitraponvej et al (hereafter '965).**

WO '009 teaches cosmetic compositions containing vinyl silicone graft or block copolymers. In particular, WO '009 teaches skin care and hair care compositions and teaches that the silicone polymers when incorporated in hair care compositions impart excellent brilliance, gloss, conditioning and style retention to hair without stiff or sticky feel (page 7, lines 17-20). The vinyl-silicone copolymer of WO '009 contains a silicone backbone with a vinyl polymeric segment grafted on to the backbone (structure on page 8). The vinyl polymeric segment represented by "A" includes the claimed monomers of instant claims 33-39 (pages 11-14). Applicants also admit that the claimed polysiloxane polymers are taught by WO '009 (page 1,

Art Unit: 1615

lines 21-26). Further, WO '009 teaches 0.01% to 30% by weight of vinyl-silicone copolymers in hair care products such as shampoos, hair rinses, hair setting products (pages 40-41). WO '009 teaches the hair care products in the form of liquid, cream, gel, rinse-off or leave-on products etc. WO '009 also teaches aerosol sprays, pump sprays etc., for setting hair in the desired style (page 41).

WO '009 teaches that the vinyl-silicone polymers can be used in combination with conventional polymers such as anionic, cationic or amphoteric polymers (page 42, lines 21-26). However, WO '009 fails to teach aqueous dispersion of insoluble particles of at least one cationic polymer of the instant claims.

'965 teaches a hair conditioning composition comprising a combination of cationic polyethelenimine, a cationic, oil-soluble, water-dispersible cross-linked quaternary acrylate/acrylamide copolymer (Polyquaternium 32), silicone conditioning agents and an anionic surfactant in an aqueous emulsion (col. 4, lines 32-67 and examples 1-3). '965 also teach the cosmetic additives and solvents of the instant claims 54-57 (col. 10, lines 41 through col. 11 and examples). '965 teach that while the presence of silicones in hair conditioning compositions in general present a problem of reducing the foaming of anionic cleansers, their compositions containing cationic polymers provide hair with improved physical properties such as gloss, thickness, softness, manageability and with excellent cleansing at high foam levels (col. 2, lines 51 through col. 3, line 26).

Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to add the water-insoluble dispersion containing cationic acrylate/acrylamide polymer conditioning agent of '965 to the vinyl-silicone polymer containing

Art Unit: 1615

hair care composition of WO '009, because '965 suggests that the combination of cationic polymers, polyethylenimine and acrylate/acrylamide, provides excellent cleansing of hair while still providing high foaming and conditioning of the hair. '965 do not teach the specific cationic polymers of claim 51. However, choosing an appropriate acrylate/acrylamide cationic polymer in the conditioning composition of WO '009 with an expectation to provide high foam and cleansing ability would have been obvious for one of an ordinary skill in the art because '965 teaches that the cleansing ability is imparted by the cationic nature of the polymers.

**7. Claims 33-39, 42, 43, 63 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 94/21224 (WO '224) in view of WO 93/23009 (hereafter '009).**

WO '224, described above, teaches a hair treating cosmetic composition comprising an aqueous dispersion of an acrylamide homopolymers or a copolymer of cross-linked methacryloxyethyl trimethylammonium chloride, and a non-volatile organopolysiloxane such as polyalkylsiloxanes, polyarylsiloxanes or organomodified polysiloxanes. WO '224 fails to teach the specific polysiloxanes of the instant claims 33-42. WO '224 also lacks the packages of instant claims 63 and 67.

WO '009, described above, teaches the organopolysiloxanes with silicone backbone on to which are grafted organic monomers. The organic monomers of WO '009 read on the instant organic monomers (pages 11-13). Applicants also state in the instant specification that the suitable polysiloxanes for the instant invention are described by WO '009 (page 4, lines 23-28). Further, WO '009 suggests using pump sprays; aerosol hair sprays to deliver the hair care compositions containing polysiloxanes (page 41, lines 1-18). Therefore, it would have been

Art Unit: 1615

obvious for one of an ordinary skill in the art at the time of the instant invention to incorporate the silicone polymers of WO '009 i.e., silicone polymers having polysiloxane skeleton with organic monomers, such as anionic, cationic, nonionic monomers, grafted on to the silicone chain, as organomodified silicones in the hair composition of WO '224 because WO '009 suggests that the silicone polymers grafted with organic monomers provide brilliance, gloss, conditioning of the hair and style retention (page 8, lines 7-10).

***Response to Arguments***

Applicant's arguments filed 11-4-02 have been fully considered but they are not persuasive.

1. Claims 30-39 and 42-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar in view of Janchitraponvej

Applicants argue one of an ordinary skill in the art would view each of the references as complete and would therefore have no motivation to combine them. In particular, applicants argue that Kumar teaches silicone copolymer whereas Janchitraponvej teaches polyethelenimine combined with cationic polymers, conditioning agents and surfactants. Thus, applicants there are no clear motivation to combine the cited references. The arguments are not persuasive because primarily both the references are directed to shampooing and conditions and both the references teach silicone conditioning agents in their compositions. While Kumar generally teaches addition of conventional polymers such as anionic, cationic or amphoteric polymers, Kumar does not specifically teach the advantage of adding cationic polymers in the hair care composition. The advantage of incorporating cationic polymers in a silicone containing hair composition comes from the teaching of f Janchitraponvej because the latter suggests that silicone alone in the

Art Unit: 1615

compositions reduce the foaming of anionic cleansers, whereas the cationic polymers impart excellent cleansing at high foam levels and thus impart hair with improved gloss, brilliance, softness etc. Thus, the motivation to add dispersible cationic polymers in the composition of Kumar comes clearly from the teaching of Janchitraponvej. With respect to the argument that Janchitraponvej requires polyethylenimine, instant comprising language allows for the presence of the other hair care ingredients of Janchitraponvej. Further, applicants urge that while the latter reference teaches for simultaneous shampooing and conditioning, Kumar teaches conditioning and shampooing separately. However, instant claims directed to a composition and non-therapeutic process of treating hair includes the conditioning as well as shampoo compositions of the prior art. Applicants' argument with respect to the specific polymer of claim 51 is not persuasive because Kumar in general teaches addition of cationic polymers and Janchitraponvej, as mentioned above, teaches the advantage of adding a cationic polymer. While the latter does not specify the polymer of cationic, applicants have not provided any unexpected advantage with cationic polymer over the other. Absent such, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use an appropriate cationic polymer with an expectation to achieve optimum cleansing as well as impart improved shine, gloss and improve other physical properties of the hair.

2. Claims 33-39, 42, 43, 63 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cauwet in view of Kumar.

Applicants argue that examiner relied on the teachings of Kumar for the claimed silicones, because the claimed silicones have been described in the instant application and

Art Unit: 1615

because Kumar suggests that silicone polymers impart brilliance, gloss, style retention etc.

Further, applicants argue that other than instant specification, there is no teaching in Cauwet or

Kumar that a combination of silicone and an aqueous dispersion of cationic polymer would be

useful in a cosmetic composition and is a hindsight reconstruction. In response to applicant's

argument that the examiner's conclusion of obviousness is based upon improper hindsight

reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a

reconstruction based upon hindsight reasoning. But so long as it takes into account only

knowledge which was within the level of ordinary skill at the time the claimed invention was

made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In the instant case, the claimed polysiloxanes are taught by Kumar, in particular for hair care

compositions. Cauwet also describes silicone polymers for hair care applications. Kumar teaches

inclusion of cationic, anionic or amphoteric polymers in combination with polysiloxane

polymers are useful in hair care products (page 42, lines 21-26). Thus, both Kumar and Cauwet

teach hair care compositions containing silicone polymers and cationic polymers. Cauwet

recognizes that incorporating an aqueous dispersion of a specific cationic polymer (such as that

claimed) imparts shine, gloss and disentangling properties. Kumar also teaches that the specific

polysiloxanes claimed also impart the same properties i.e., shine, gloss, style retention and

conditioning properties. Thus, both the teachings are analogous and have recognized the

advantages of claimed silicone polymers and cationic polymers well before instant invention.

Thus, examiner's combination of references does not constitute a hindsight reconstruction, rather

it would have been obvious for one of an ordinary skill in the art at the time of the instant



Art Unit: 1615

invention to incorporate the claimed polysiloxanes of Kumar in the aqueous dispersion (of Cauwet) containing claimed cationic polymers with an expectation to provide conditioning, brilliance and gloss and hair style retention.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7924 for regular communications and 703-308-7924 for After Final communications.

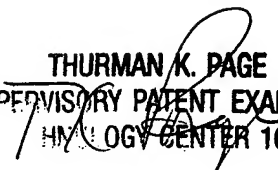
Art Unit: 1615

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lakshmi S Channavajjala  
Examiner  
Art Unit 1615

March 7, 2003



THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
HMC LOGV CENTER 1600